United States Patent [19]

Miyata et al.

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[54] **MEDICAL MATERIAL**

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[52] **U.S. Cl.** **623/11**; 623/1; 623/16

[58] **Field of Search** ..... 623/18—23, 623/11, 16, 1; 128/1 R, 92 C, 92 CA, 334 R, 335 R, DIG. 21

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[57] **ABSTRACT**

The medical material according to this invention contains collagen, which as been chemically modified by saccinylation of thermal —NH_2 groups of said chains attached to poly peptide chains of the collagen so that the —NH_2 groups are converted into groups having —COOH groups. This succinylation can be carried out by reacting succinic anhydride with the —NH_2 groups of the collagen. Since the above medical material has excellent compatibility with living bodies, especially, with blood, it is suitable to use it as a replacement material for tissues and/or organs which are kept in contact with blood at their surfaces, namely, is suitable for use in artificial blood vessels, artificial valves, some parts of artificial hearts which are kept in contact with blood at said parts, etc. and as a patching material for hearts.

13 Claims, No Drawings